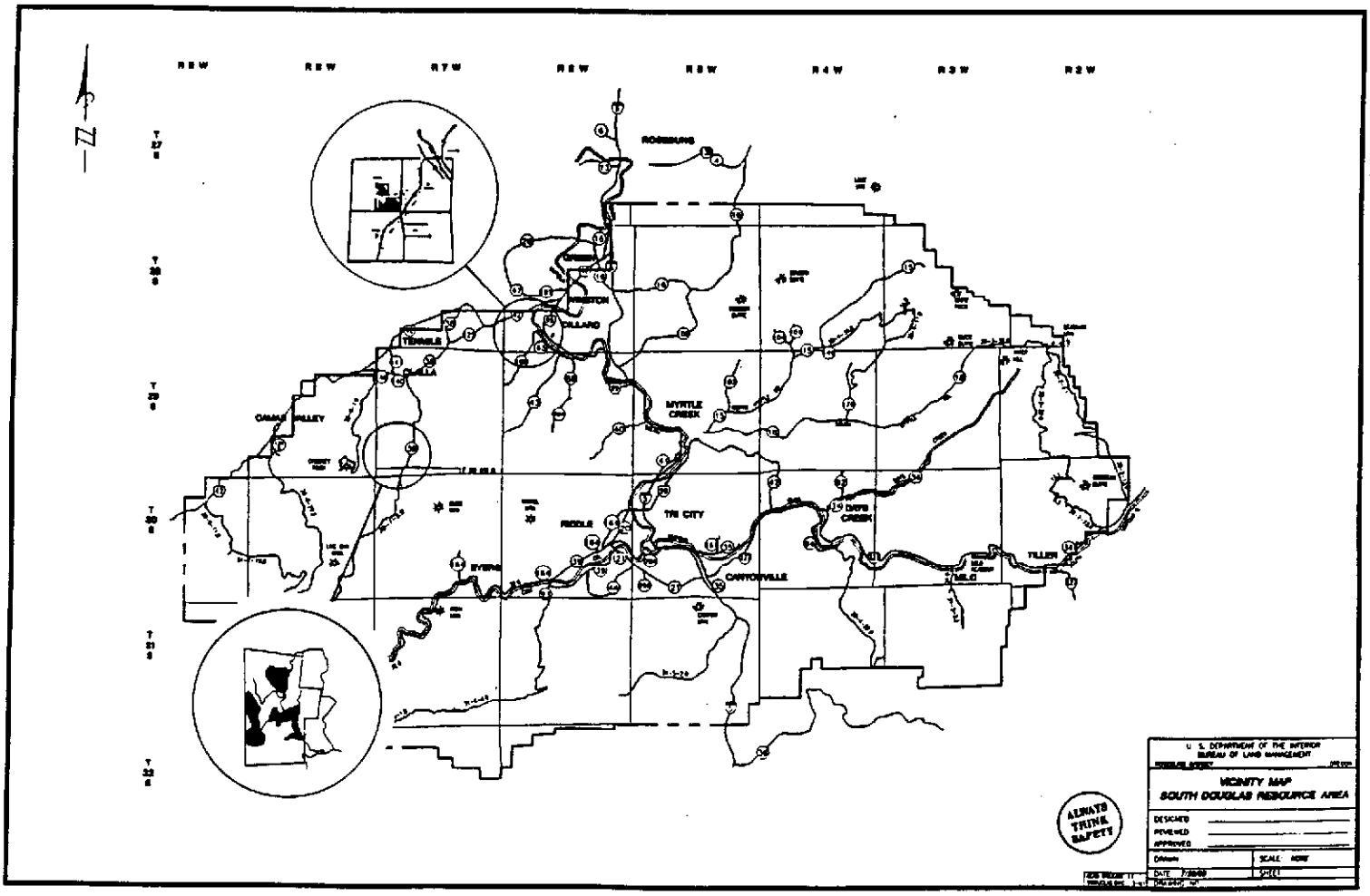
OLD DILLARD TIMBER SALE

Environmental Assessment
OR105-95-07

South Douglas Resource Area
Roseburg District BLM

T28S R6W Section 31
&
T29 & 29½S R7W Section 31



July 6, 1995

Table of Contents

Chapter 1
PURPOSE AND NEED FOR ACTION

The South Douglas Resource Area of the Roseburg District of the Bureau of Land Management (BLM), proposes a timber harvest in the Mt. Shep and Kent-Rice Watershed Analysis Units (WAU). The legal description is; 29 & 29½-7-31 and 28-6-31 (see vicinity map, front cover). The proposed project area is located within the Matrix land allocation as described in the April 13, 1994, Standards and Guidelines (S & G's) for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl and Record of Decision (ROD). The S & G's state that most timber harvest and other silviculture activities would be conducted in that portion of the matrix with suitable forest lands, according to the standards and guidelines. Scheduled timber harvest which contributes to the probable sale quality (PSQ), occurs in the Matrix lands. The purpose of this sale is to meet the PSQ for the resource area. The objectives in Matrix are to:

- produce a sustainable supply of timber and other forest commodities.
- provide connectivity (along with other allocations such as Riparian Reserves) between Late-Successional Reserves.
- provide habitat for a variety of organisms associated with both late-successional and younger forests.
- provide for important ecological functions such as dispersal of organisms, carryover of some species from one stand to the next, and maintenance of ecologically valuable structural components such as down logs, snags, and large trees (6-8 live conifers per acre).
- provide for early-successional habitat.

(Roseburg District Record of Decision and Resource Management Plan (ROD/RMP), June 2, 1995, p. 33).

Also included in this proposal is seed tree cleaning. The seed tree cleaning would be done in order to improve growing conditions for those trees and to minimize squirrel damage to cone crops.

Fence would be constructed around the BLM parcel in 28-6-31, in order to keep livestock from damaging seedlings and riparian areas. This would limit livestock use on BLM and ensure that the Aquatic Conservation Strategy (ACS) objectives are met (S & G's, C-34).

Additional renovation (outside the actual sale area) on the haul route (Olalla Road) in 30-7-5, to eliminate the safety hazard of a narrow spot in the road, is necessary. This renovation includes the potential of blasting at mile post 0.4.

I. Decisions To Be Made

A. Can this sale be harvested without adversely impacting the riparian reserves, as

defined in the ROD, and quantified for the Analytical Watershed.

B. What modifications need to be made in order to be in compliance with the ROD.

C. Are there any additional site specific considerations that need mitigation before this sale can be offered.

II. Scoping

In order to involve the public in preparing the sale and implementing the National Environmental Policy Act (NEPA) process, notification of the project proposal was made, via mail, to; landowners adjacent to the project area, Douglas Timber Operators, and the Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz Indians, Coquille Indian Tribe, and Cow Creek Band of Umpqua Tribe of Indians. The US Fish & Wildlife Service was notified via the consultation package prepared in April 1995. The National Marine Fisheries Service was informally contacted about the potential effects on the Umpqua River cutthroat trout in March 1995. The Old Growth Defense Council, Pacific Rivers Council, Umpqua Watersheds, Oregon Natural Resources Council and the Coast Range Association were notified via mail. The Douglas County Soil and Water Conservation District was notified via phone call. This project was also included in the Roseburg BLM Project Planning Update (Winter 1995). Concerns about reforestation in the Olalla Creek area were expressed by a member of the public, and considered in this environmental assessment (EA).

III. Scope of Analysis

The Interdisciplinary Team (IDT) members brought forward concerns related to resources that had the potential of being affected by the proposed action. All concerns were determined to not be significant issues because they would be mitigated through project design and application of Best Management Practices (BMP's), in the Proposed Resource Management Plan/Final Environmental Impact Statement (PRMP/FEIS, Volume II, Appendix J).

Chapter 2
DISCUSSION OF ALTERNATIVES

I. Process Used to Formulate Alternatives

The IDT developed a proposed action. There were no alternatives developed beyond the proposed action since no significant issues were determined. There were no alternatives considered and eliminated from further analysis. Mitigation has been determined and would be incorporated in implementation of the project. The no action alternative will also be analyzed in this EA.

II. Project Design Features

The following features would be incorporated in implementation of alternative 2, the proposed

action:

A. The project would be designed to meet the ACS objectives, for Riparian Reserves and Matrix (S & G's), C-31 to C-38 and C-39 to C-48).

RIPARIAN RESERVES

1. All perennial and intermittent streams, including unstable or potentially unstable areas, within the harvest units, would be included in Riparian Reserves. The Reserves would have a width of approximately 160 feet, slope distance, (based on a site potential tree height), on each side of the channel.

MATRIX (General Forest Management Area (GFMA))

2. Retain 6 to 8 green trees/acre greater than 20 inches, diameter breast height (DBH), irregularly scattered and/or grouped.

3. Reserve at least 1.2 existing snags per acre (PRMP/EIS, Vol. I, p.4-43). Where existing snags do not occur or cannot be safely retained, additional green trees would be reserved for snag recruitment.

4. Retain coarse woody debris (minimum of 120 linear feet/acre, greater than or equal to 16 inches (large end) and 16 feet in length (Instruction Memorandum (IM-95-028, 11/94)).

5. Road construction & maintenance would meet standards and guidelines as stated in the S & G's (p. C-32 & 33) and the BMP's listed in the PRMP/FEIS (Appendix J45-51).

6. If bats are found, the species would be identified and determination would be made as to the reason the site is being used by the bats. As an interim measure, timber harvest would be prohibited within 250' of sites containing bats (S & G's, C-43).

B. Best Management Practices would be required for ground based activities, including harvest and/or site preparation (PRMP/EIS, Vol. II, Appendix J, p. 44 & 51).

C. Where harvest occurs adjacent to wet areas, or riparian reserves, timber would be felled away from these protected areas.

D. Green trees would be left adjacent to wet areas less than one acre in size to help maintain and protect the integrity of these wet areas.

E. Leave trees would be "clumped" around significant advanced regeneration pockets to minimize the need for logging entry or to provide a buffer against the occurrence of falling/yarding induced damage (PRMP/EIS, Vol. II, Appendix L, p.63).

F. In harvest areas immediately adjacent to advanced regeneration pockets and their associated leave trees, harvested trees would be directionally felled away from these pockets. This would maintain integrity of existing regeneration.

G. Advanced regeneration pockets and their associated leave trees would be firetrailed out where feasible to avoid damage during broadcast burning.

H. Prescribed fire treatments for site preparation, in order to create planting spots and for initial vegetation control, would be planned and implemented after harvest. Plans would be developed using the IDT approach. The team would include a representative from; soils, silviculture, wildlife and fire. Treatments would be planned in order to minimize; intensive burns, consumption of litter and coarse woody debris, damage to residual live trees, and impacts to air quality (PRMP/FEIS, Vol. II, Appendix L, p.63). A combination of piling (machine or hand)/burning and broadcast burning would be utilized.

I. Along the fence line in 28-6-31, fall the trees into the units or riparian reserves, in order to not damage private reproduction or resources.

J. Regeneration would occur through planting and/or natural seeding. Utilization of planting stock with well developed root systems would enhance survival. Planting stock would include; Douglas fir, ponderosa pine, sugar pine,incense cedar and possibly grand fir. Paper mulching seedlings at time of planting would suppress grass and other competing vegetation. Seedling shading and tubing may be utilized to protect the seedling from heat and moisture loss, and control animal damage. (PRMP/EIS, Vol. II, Appendix L, p. 62 & 64).

K. Douglas-fir would be the primary leave tree species selected. In addition, a natural mix (based on both species occurrence and vigor) of other conifer species (ponderosa pine, sugar pine and incense cedar) and occasional large hardwoods (madrone, chinkapin, California black oak and big leaf maple) would be left. This would assure stand diversity and promote natural regeneration. Diverse species seed sources would help contribute to the natural regeneration success, thereby supplementing artificial regeneration efforts.

L. The Umpqua basin cutthroat trout (Oncorhynchus clarki clarki) is expected to be listed as an endangered species by the National Marine Fisheries Service (NMFS), in July 1995, under the Endangered Species Act of 1973, as amended. If the cutthroat is listed and alternative 2 is chosen, a "may effect" call would be made and the action would require consultation with NMFS and potentially the US Fish and Wildlife Service (USFWS).

M. The Reasonable and Prudent Measures outlined in the consultation response from the USFWS memo (May 31, 1995), would be implemented:

1. To prevent disturbances to spotted owl pairs and progeny; prohibit harvest activities within a minimum of 0.25-mile radius (or further if deemed necessary by the action agency biologist) of the nest site or activity center

of all known pairs and resident singles between March 1 and June 15, during the year of harvest. This measure is non-discretionary.

These terms and conditions may be waived in a particular year if nesting or reproductive success surveys conducted according to the USFWS-endorsed survey guidelines reveal that spotted owls are non-nesting or that no young are present that year. Waivers are valid only until March 1 of the following year.

2. To prevent disturbances to murrelets and their progeny; work activities occurring between April 1 and September 15, and occurring within 0.25 miles of unsurveyed suitable murrelet habitat or known occupied sites, will be scheduled to occur no earlier than two hours after sunrise and no later than two hours before sunset.

N. The contractor would be required to operate in a manner that prevents pollution. This would include, but is not limited to insuring that all chemicals to be stored on site (including petroleum products); have a Material Safety Data Sheet (MSDS) with them, are in closed containers and secondary containment, and quantities would be kept to a minimum.

O. Pacific yew would be located and tallied as the sale is cruised. All yew would be reserved in the timber sale contract.

III. Description of Alternatives

Alternative 1-No Action

Harvest would not occur in this location at this time. Harvest would occur in another location within the Matrix lands in order to meet harvest obligations. The seed trees would not be cleaned around, nor would fence be built. Road renovation/construction would not take place. Existing skid trails and the dirt road adjacent to unit 3 in 29-7-31, would not be tilled.

Alternative 2-Proposed Action

This alternative consists of two units located in 28-6-31 and three units in 29 & 29½-7-31 (Appendix A-1 & 2). Approximately 4.0 million board feet (MMBF) would be cable or ground based harvested from 138 acres. Unit 4 is planned for approximately 14 acres of ground based harvest, and unit 5 has approximately 5 acres. Table 1 (p. 7) summarizes the alternative. There would be 1.9 miles of new road construction, which would be rocked and permanent. There would be 3.9 miles of road renovation for this alternative. Road renovation would also occur between mile post .40 and .42 on the 30-7-5.0 road. This would include replacement of culverts and widening. Some rock blasting may be needed for this renovation.

No roads would be constructed in Riparian Reserves. The 30-7-8.0 road would be tilled with a winged subsoiler, from the junction of the 29-7-31.3 road construction, to the end of the 8.0 road (.42 miles)(Appendix A-2). This tillage would increase infiltration and decrease runoff along this road.

Approximately 14 ponderosa pine seed trees would be cleaned around. This entails cutting adjacent trees and brush from around the seed trees in order to alleviate competition and limit access to the cones by squirrels (Appendix A-2). The felled timber would be removed. Cleared openings around each seed tree average 60' diameter in size.

Prior to harvest, approximately 1 mile of existing skid trails in the units in 29 & 29½-7-31 would be tilled with a winged subsoiler. ~~prior to harvest~~ to reduce compaction and increase infiltration. Skid trails used for this harvest would be tilled after use.

Fence would be constructed in order to enclose the entire BLM 120 ac. parcel in 28-6-31. Approximately 2.2 miles would be constructed on BLM and approximately .30 miles along an easement on the E unit boundary. This would require falling trees along the property line on the boundaries of the riparian reserves.

Site preparation would occur in order to facilitate successful reforestation. The method and extent of which would be determined once the units are harvested, based on post harvest site conditions (i.e. slope, amount of slash and unwanted vegetation present, and presence of conifer reproduction). Other resource values including soils, down woody debris and wildlife retention trees, need protection and would be evaluated when selecting from among any of the following site preparation techniques: handpile/burn, machine pile/burn, broadcast burn or handscalp (PRMP/FEIS, Vol. I, Chapter 2-67 & 68).

Harvest units would be planted within one year of the completion of site preparation. The need for plantation protection, maintenance, and release, would be determined through survival surveys, in order to meet stocking standards.

Table 1

COMPARISON OF ALTERNATIVES

NOTE: **All values are approximate.**

ACTION	ALT #1	ALT #2	
ACRES HARVESTED: **28-6-31** **29 & 29½-7-31** **TOTAL**	0		72 66 **138**
GROUND BASED HARVEST (Acres) *Remainder of acres would be cable yarded.	0	Unit 4	14
		Unit 5	5
TIMBER VOLUME YIELD (MMBF)	0		3.95
ROAD CONSTRUCTION (Miles)	0		1.9
ROAD RENOVATION (Miles)	0		3.9
LENGTH OF 30-7-8.O ROAD TO BE TILLED (Miles)	0		.42
No# OF ROAD STREAM CROSSINGS	0		0
NET ROAD GAIN (Miles) Note: approx. .37 miles is on private land and has been subtracted from the rd. const. length stated above.	28-6-31: 0		1.30
	29 & 29½-7-31: 0		.23
FENCE TO BE CONSTRUCTED (Miles)	0	Property Line Easement	2.16 .28

Chapter 3
EXISTING ENVIRONMENT

This chapter will summarize the existing environment in the project area, prior to project implementation. It will describe the resources site specific to the project area, that would be affected by the alternative.

I. WILDLIFE

About 298 wildlife species (birds, mammals, reptiles, and amphibians) are known to occur or suspected to occur in the Roseburg District. An overview of the potential wildlife species in the area has been addressed in the PRMP/FEIS (Vol. 1, Ch. 3-24 to 40).

A. SPECIAL STATUS SPECIES

Special Status Animals within the Roseburg District consist of seven mammals, seventeen birds, eight amphibians, and four reptiles (RMP/EIS, Vol. I, Table 3-19, p. 3-35).

Of the five species federally listed as threatened or endangered, only the northern spotted owl is known to occur within the project area. The project area is within the 50-mile inland range for the marbled murrelet. Protocol level surveys over the past two years for the murrelet, have not resulted in any detections.

Two spotted owl sites are located within 1.3 miles of proposed harvest in 29 & 29½-7-31 (Table 2, p. 9). Suitable habitat on BLM lands prior to harvest is 975 acres on master site number (MSNO) 2039 and, 910 acres on MSNO 3907. Both sites are below the 1336 acre "incidental take" threshold prior to harvest. Within 0.7 miles of both sites, suitable habitat acres are below the 500 acre threshold; 398 acres for MSNO 2039, and 361 acres for MSNO 3907.

Dispersal habitat in the S.W. Quarter of 28-6, is 123 acres prior to harvest in section 31 (Table 4, p. 14). The S.W. Quarter of 29 & 29½-7, have a total of 1,486 acres of dispersal habitat prior to harvest. All three Quarter Townships are above the 50 percent level prior to harvest for suitable dispersal habitat.

Table 2

NORTHERN SPOTTED OWL SUITABLE HABITAT
(Acres)

SITE (MSNO)	1.3 MI. RADIUS*		0.7 MI. RADIUS	
	PRIOR TO HARVEST	AFTER HARVEST	PRIOR TO HARVEST	AFTER HARVEST
2039	975	944	398	398
3907	910	844	361	341

* 1.3 miles is the median home range of the Klamath Province in which this sale area is located.

Of the three remaining federally listed species, only the bald eagle and peregrine falcon have potential to occur in the project area. Neither have been observed. Inventories for the bald eagle, by Oregon State University, Bob Anthony (1993-1994), have not identified any sites within the project area. Specific surveys for the peregrine falcon have not been conducted, however, habitat (cliffs and ledges) likely used by the falcon, does not exist in the project area.

The project area is beyond the range of the Columbian White-tailed Deer.

There are no cutthroat trout in the streams within the project area.

No suitable bat roost and hibernacula sites (caves, mines, wooden bridges, or old buildings (S & G's, C-43)) were sighted during field reviews for this analysis.

II. SPECIAL STATUS PLANTS

There were no Special Status plants found in the 1991-92 surveys. The meadow in the unit 4, is considered a special habitat feature.

III. VEGETATION/TIMBER RESOURCES

29 & 29½-7-31 - The stands in this section have been salvage harvested numerous times. Douglas-fir is the predominant overstory species along with a few scattered ponderosa pine, incense cedar and grand fir. Madrone and chinkapin exist in the lower canopy of the overstory even though past girdling and chemical treatments were successful in killing some. In openings in the overstory canopy, a understory Douglas-fir, ponderosa pine, incense cedar and grand fir stand is being established. Other vegetation includes; live oak, manzanita, ocean spray, salal, poison oak and beargrass. Large woody debris is scarce and heavily decayed. Some smaller down woody material exists. This portion of the project area contains 14 ponderosa pine seed

trees (Appendix A-2).

28-6-31 - The stands in this section have had no previous entry and are single-storied. There are few trees on south aspects which exceed 24" DBH. Trees larger than 24" DBH exist predominantly on north aspects. Douglas-fir is the predominant overstory species along with a few scattered ponderosa pine and incense cedar. There is an occasional large, fire scarred ponderosa pine or Douglas-fir overtopping the main canopy. There are some heavy concentrations of madrone and California black oak in the lower canopy of the overstory, mainly on ridges and south aspects. Bigleaf maple and Oregon-myrtle are present in some of the moist draws. There are some pockets of advanced Douglas-fir regeneration beneath small canopy openings with incense cedar and grand fir scattered through the sparse understory. Grass and herbs comprise the majority of ground cover with some sword fern on north aspects. Large woody debris is scarce.

IV. WATER RESOURCES/RIPARIAN/FISH

28-6-31 - Units 1 and 2 are located in the Kent-Rice WAU. There are six distinct draws within the unit boundaries which are encompassed by Riparian Reserves. The draws are "nonpermanent flowing drainage feature(s) having a definable channel and evidence of annual scour or deposition". There are no fish bearing streams in the units in this section.

The stream channels within these units are lacking large woody debris (LWD). The adjacent riparian areas are in mature timber and a high potential exists for future recruitment of LWD into these draws.

The intermittent stream located on the west boundary of the unit, has deeply incised streambanks. The riparian vegetation and stream channel have been impacted by domestic livestock. The waters originating here, contribute to the water quality downstream in Squaw Creek, which is a third order stream. Anadromous and resident stocks of salmonid species inhabit Squaw Creek and Kent Creek throughout the year. This draw is encompassed within a Riparian Reserve.

According to GIS, the Kent-Rice WAU has a road density of approximately 4.3 miles/square mile. Section 31 appears to have a lower road density than the rest of the WAU. There are no existing roads within units 1 and 2 on BLM managed lands in section 31.

29 & 29½-7-31 - Units 3, 4, and 5 are located in the Mt. Shep WAU. Unit 3 contains one distinct draw which has no annual scour nor deposition, and a swale/wetland area which is less than 1 acre in size. Units 4 and 5 have riparian reserves adjacent to the unit boundaries containing intermittent streams, and unit 4 has a swale on the east side of the unit, southeast of the 29½-7-31.2 road. (Refer to the Fisheries Report map (EA file) for the above locations). The intermittent stream adjacent to unit 4 has been impacted from previous salvage logging which has aided in concentrating the intermittent flows and altering the flow regime.

Both intermittent streams are tributary to Olalla Creek. There are no fish bearing streams within the boundaries of the proposed timber sale units. Olalla Creek, a major tributary to

Lookingglass Creek, contains stocks of anadromous and resident salmonid species.

The riparian reserve containing a perennial stream, adjacent to the northeast boundary of unit 5 is dissected by the 29-7-31.0 road. Large woody debris is lacking at this location and channel morphology has been altered by the placement of the culvert, however, there does not appear to be any degradation presently occurring at the stream crossing.

Several sections of road to be renovated for the proposed timber sale, have inadequate surface drainage (Fisheries Report map-EA file). These sections of road have begun rutting. The road system accessing the sale units crosses ten tributaries to Olalla Creek, two second order and eight first order draws. According to the transportation information in the Geographic Information System (GIS), there are approximately 5.2 miles of road/square mile within the Mt. Shep Watershed Analysis Unit and 5.7 miles of road/square mile within the Mt. Shep Subbasin. Section 31 appears to have a higher road density than the rest of the WAU. The majority of the roads in this section have rocked surfaces.

The South Umpqua River is water quality limited as defined by Oregon Department of Environmental Quality (1988 Oregon Statewide Assessment of Non-Point Sources of Water Pollution). The intermittent draws in this sale area are tributaries to it.

Stream channel stability surveys (Pfankuch surveys), on four stream reaches, were conducted on May 3, 1995 on the tributary located in the south ½ of the south west portion of 29½-7-31. All four reaches rated out as *Fair*. These reaches are outside of the proposed timber sale area. However, the stream originating in unit 4, enters into this tributary (see evaluation and further discussion in the Fisheries Report-EA file).

V. SOILS

29 & 29½-7-31 - slopes are moderately steep to steep and are formed from rhythmically bedded sandstone and siltstone. Soils are deep with scattered small areas of moderately deep and shallow soils. Soil textures are medium or moderately fine. The soils are normally well drained. Wet areas are not common and exist only in small areas in draws and breaks in the landscape associated with shallow soils and/or unstable slopes. Slope instability is not a common occurrence. When slope instability does occur, it is usually related to road construction. Compacted soils caused by previous ground based harvest activities are common to the area.

28-6-31 - the ridgetops and steep side-slopes are formed from massive to thickly bedded graywacke sandstone and thin interbeds of dark siltstone. Soils are usually moderately deep to shallow with scattered areas of deep soils. Texture of the soil surface layer is usually medium and the subsoil is usually moderately fine. Soils are well drained to excessively well drained. Wet areas are not common and exist only in small areas in draws and breaks in the landscape associated with unstable slopes. Deep seated slope failures (earth slumps) occur in two locations on the site. Shallow slope movement (soil creep) is common, except on ridgetops. Silt and fine sand within the soil profile are conducive to increased surface erosion when disturbed.

VI. CULTURAL RESOURCES

No cultural resources were found in 1991 surveys in section 31 of 28-6, nor in section 31 of 29 & 29½-7 in 1992. The inventory reports were sent to the State Historic Preservation Office, which concurred with a no effect determination. The requirements of the National Historic Preservation Act have been met.

Chapter 4
ENVIRONMENTAL CONSEQUENCES

This chapter is the scientific and analytic basis for the alternative comparisons.

Alternative 1 - No Action

I. WILDLIFE

Existing habitat conditions would be maintained for mature or old-growth species.

A. SPECIAL STATUS SPECIES

Existing habitat conditions would be maintained for mature or old-growth species.

II. SPECIAL STATUS PLANTS

There would be no anticipated impacts to potential populations of plant species other than by natural selection. There would be no activity in the meadow in unit 4, and thus no impacts to it.

III. VEGETATION/TIMBER RESOURCES

No regeneration harvest or seed tree cleaning would be conducted. The stands will continue to age with concurrent growth in diameter and height. Competition for growing space, moisture and nutrients from surrounding trees and brush will continue to inhibit cone production on seed trees. Stand damage in the form of small natural openings would continue to occur as a result of minor disturbances such as wind, insects and disease. If very little growing space is released through disturbance, vigorous residual trees will soon occupy available space and prevent the establishment of new seedlings. As minor disturbances become increasingly severe, they may create site conditions that are favorable for the regeneration of conifers, hardwoods and brush that will initiate a secondary canopy layer. Depending on available growing space, this new layer may soon become suppressed and remain on the forest floor stratum as advanced regeneration or may grow to become a major component of the overall stand (Oliver 1990). If major disturbance such as fire continues to be excluded, conditions over time could be conducive

to a catastrophic fire.

IV. WATER RESOURCES/RIPARIAN/FISH

No new roads would be constructed nor renovated. No skid roads would be tilled. Because of skid roads (having greater compaction, leading to less efficient infiltration and therefore, contributing to greater runoff, and thus increased sediment loading) in units 3, 4, and 5, those areas would not meet the intent of the ACS objectives (PRMP/EIS Vol. I, Ch. 2-4 & 5).

The aquatic and fisheries resources would likely be maintained at their current levels. No adverse impacts are expected other than those occurring from natural events and past management practices. The fisheries resource would not likely be compromised by no action.

V. SOILS

Soil surface erosion, slope stability, wetlands and riparian reserves would not be affected. The Kent-Rice WAU would not be impacted. The Mt. Shep WAU would not receive the BMP's (i.e. tillage, road surfacing, revegetation of bare soil areas, cross drains, etc.) needed to comply with the intent of the ACS objectives.

Alternative 2 - Proposed Action

I. WILDLIFE

Habitat manipulation is the major influence which impacts all animal species inhabiting or using the project area. The impacts which could be anticipated from timber harvest activities are discussed in the (PRMP/FEIS, p. 4-36 to 47).

A. SPECIAL STATUS SPECIES

With this alternative, there would be a loss of Marbled Murrelet habitat within the 50 mile inland range. However, as stated in Chapter 3 (Existing Environment), murrelet surveys conducted for the past two years, have resulted in no murrelet detections. Therefore, the sale area is considered unoccupied by the murrelet.

Harvest of this sale area would remove 138 acres of suitable habitat for the northern spotted owl. Suitable habitat would be removed from the home range (1.3 mile) of two owl sites. MSNO 3907 would have 66 acres removed and MSNO 2039 would have 31 acres removed. The total habitat removed from both sites would be 66 acres due to overlapping home ranges (Table 3). Both sites are below the 1,336 acre threshold for "incidental take" of a listed species and is considered a "may affect".

Suitable habitat within 0.7 miles of MSNO 3907 prior to harvest is below the 500 acre threshold, and will be further reduced by 20 acres to 341 acres after harvest (Table 2). There would be no harvest within MSNO 2039.

Table 3

COMPARISON OF CONSEQUENCES
SUITABLE HABITAT

NOTE: **All values are approximate.**

ACTION	ALT #1	ALT #2
SUITABLE HABITAT HARVESTED (Acres)	0	138
SUITABLE HAB. HARVESTED W/IN 1.3 MI.* OF THE TWO OWL SITES (Acres)	0	MSNO 3907 66
		MSNO 2039 31
SUITABLE HAB. HARVESTED W/IN 0.7 MI. OF THE TWO OWL SITES (Acres)	0	MSNO 3097 20
		MSNO 2039 0

* 1.3 miles is the median home range of the Klamath Province in which this sale is located.

Dispersal habitat for three Quarter Townships would be reduced on BLM lands. Two Quarter Townships would remain above the fifty percent threshold. One Quarter Township will be taken from 123 acres to 53 acres which lowers dispersal habitat to 43% in this Quarter Township (Table 4).

Table 4

COMPARISON OF CONSEQUENCES
DISPERSAL HABITAT

NOTE: **All values are approximate.**

LOCATION	DISPERSAL HABITAT PRIOR TO HARVEST (on BLM)	DISPERSAL HABITAT AFTER HARVEST (on BLM)
28-6-31	123*	53
29 & 29½-7-31	1486	1348

* **Total BLM ownership in the Quarter Township.**

The salvage of merchantable trees felled from around selected plus trees when considered alone is not a "may affect" action on the spotted owl.

Blasting within one (1) mile of a known site is considered as "may affect" action if the site is

occupied. The road renovation at Mile Post 0.4 of the 30-7-5.0 road is located within one (1) mile of site No. 3907 and during the nesting season could have adverse impacts on the spotted owls using this site.

The above impacts fall within the range expected, as described in the Roseburg District Resource Management Plan/Environmental Impact Statement, and as such are not considered significant issues.

Impacts for each of the following special status species, as related to the proposed action, have been evaluated and the following determinations made:

May Affect-Not Likely to Adversely Affect	No Affect
northern spotted owl	peregrine falcon
bald eagle	Columbian white-tailed deer
marbled murrelet	

II. SPECIAL STATUS PLANTS

There would be no anticipated impacts to potential populations of plant species other than by natural selection.

III. VEGETATION/TIMBER RESOURCES

Cone production of ponderosa pine seed trees would likely be enhanced due to additional growing space and reduced competition for moisture and nutrients. All other impacts have been analyzed in the PRMP/FEIS, Vol. I, Ch. 4-33 (Effects on Vegetation) and 4-79 & 80 (Effects on Timber Resources).

IV. WATER RESOURCES/RIPARIAN/FISH

There would be a total of approximately 1.9 miles of permanent new road constructed under this alternative. Road densities in the Mt. Shep WAU are a concern. The impacts associated with high road densities could include; the extension of the stream channel network due to roadside ditching, and increased rate of sediment routing, the increased interception of subsurface and surface flows, a decrease in soil infiltration rate,and an increase in the severity of peak flow events (Wemple 1994 and Jones & Grant 1993). However, the construction of additional roads for the Old Dillard timber sale, would have minimal impacts and would be negligible on the scale of the entire Roseburg District. The short term impacts from the addition of new roads are not expected to significantly impact the health of these watersheds. The cumulative impacts from the continual construction of roads, however, could result in degradation of the aquatic resources. Based on the analysis for this project, there would be no impacts on the aquatic resources beyond those analyzed in the PRMP/FEIS (Vol. I, Ch. 4-17 through 22).

V. SOILS

There would be no impacts beyond those already analyzed in the PRMP/FEIS, Vol. I, Ch. 4. Chapter 4 defines and compares environmental consequences to the existing environment. Refer to Soils (4-12 to 17), Water Resources (4-17 to 22), Riparian Zones (4-34 through 36) and Timber Resources (4-75 through 81).

Cumulative Impacts of the Proposed Action

The PRMP/FEIS (Vol. I, Ch. 4-7 to 4-100) discusses cumulative impacts of activities implemented collectively throughout the district. These impacts result from past, present, and reasonably foreseeable activities on BLM lands and other lands (other public & private).

There are no other BLM harvest activities planned in these WAU's in the reasonably foreseeable future, except cleaning around three seed trees in the Kent-Rice WAU in fall 1995 or spring 1996.

Chapter 5
LIST OF PREPARERS

Name	Title	Resource or Discipline	Signature	Date
Sigrid Barron	Environmental Coordinator	ID Team Leader	Sigrid M Barron	7/3/95
Dave Fehringer	Forester	Silviculture	David L. Fehringer	7/11/95
Frank Oliver	Wildlife Biologist	Wildlife/T & E Species	Franklin M. Oliver	7/6/95
Rob Hurt	Fisheries Biologist	Fisheries	Robert C. Hurt	7/6/95
Gary Basham	Special Status Plant Coordinator	Special Status Plants	Gary Basham	7/10/95
Dennis Hutchison	Soil Scientist	Soils/Water	D. Hutchison	7/6/95
Isaac Barner	District Archeologist	Cultural Resources	Isaac M Barner	7/6/95
Steve Niles	Forest Manager	Management Representative		7-7-95
Bill Adams	Fire Management Specialist	Fuels Management	WJ Adams	7/7/95
Mike Anderson	Civil Engineering Technician	Road Engineering	Michael R Anderson	7-11-95

Analysis Compiled By: Sigrid M Barron 7/11/95

Sigrid Barron
Environmental Coordinator

Date

Chapter 6
LIST OF AGENCIES AND PERSONS CONSULTED

1. Agencies & Persons Consulted:
   Richard Chasm
   Oregon Natural Resources Council
   Francis Eatherington
   Douglas County Watermaster
   US Fish and Wildlife Service
   Oregon Department of Fish and Wildlife

2. The following agencies, organizations, and individuals will be notified of this action if it is implemented:

Coast Range Association
Division of State Lands
Douglas County Board of Commissioners
Oregon Department of Environmental Quality
Oregon Department of Fish and Wildlife
Oregon Department of Forestry
Oregon Land Conservation & Development
Oregon Natural Resources Council
Pacific Rivers Council
US Environmental Protection Agency
US Fish and Wildlife Service
Umpqua Regional Council of Governments
Richard Chasm
Francis Eatherington
A notice of decision would be published in the News Review if the decision is made to implement the project.

LITERATURE CITED

ones, J.A. and Grant, G.E. 1993. Peak Flow Responses to Clearcutting and Roads, Western Cascades, Oregon: II, Large basins. Draft Report.

)liver, Chadwick D. and Larson, Bruce C. 1990. Forest Stand Dynamics.

Vemple, Beverly C. 1994. Hydrologic Integration of Forest Roads with Stream Networks in Two Basins, Western Cascades, Oregon. Masters Thesis, Oregon St. Univ. Corvallis, Oregon.

APPENDIX A

MAPS

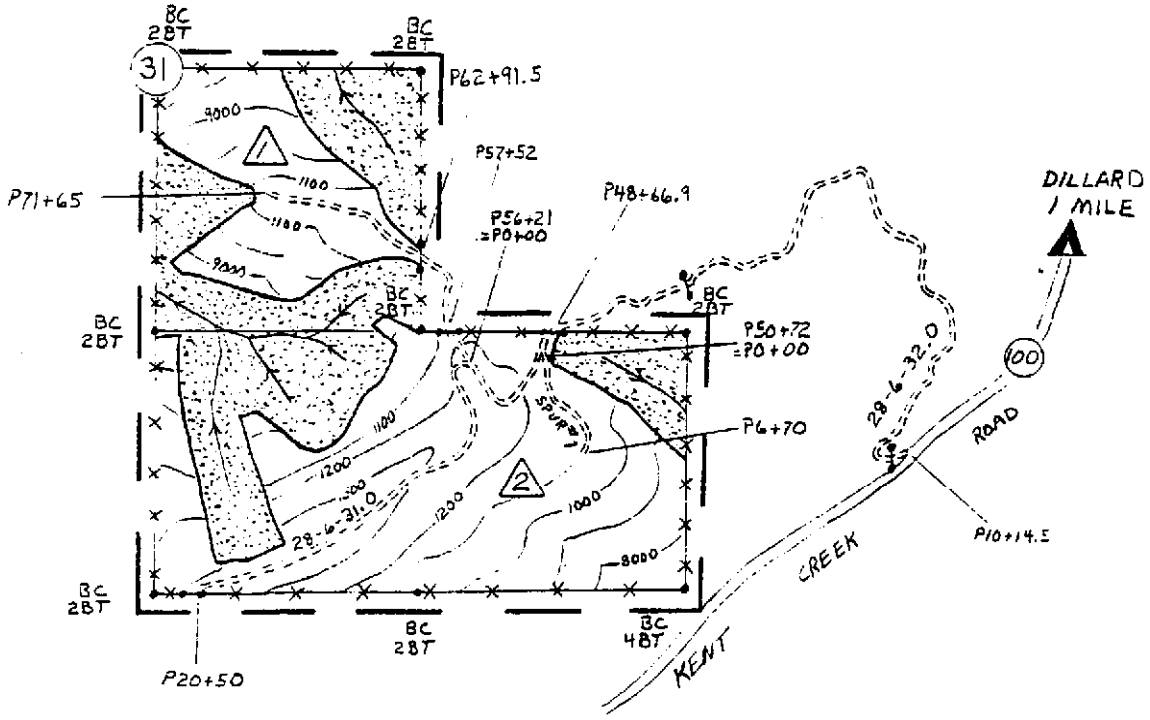
U.S. Department of the Interior
Bureau of Land Management

EXHIBIT "A"

Sale Name

Tract Number

District	Township	Range	Section	Meridian	Contract Number
ROSEBURG	29 S	6 W	31	WILLAMETTE	



UNIT MAP

APPENDIX A-1

U.S. Department of the Interior
Bureau of Land Management

EXHIBIT "A"

Sale Name OLD DILLARD

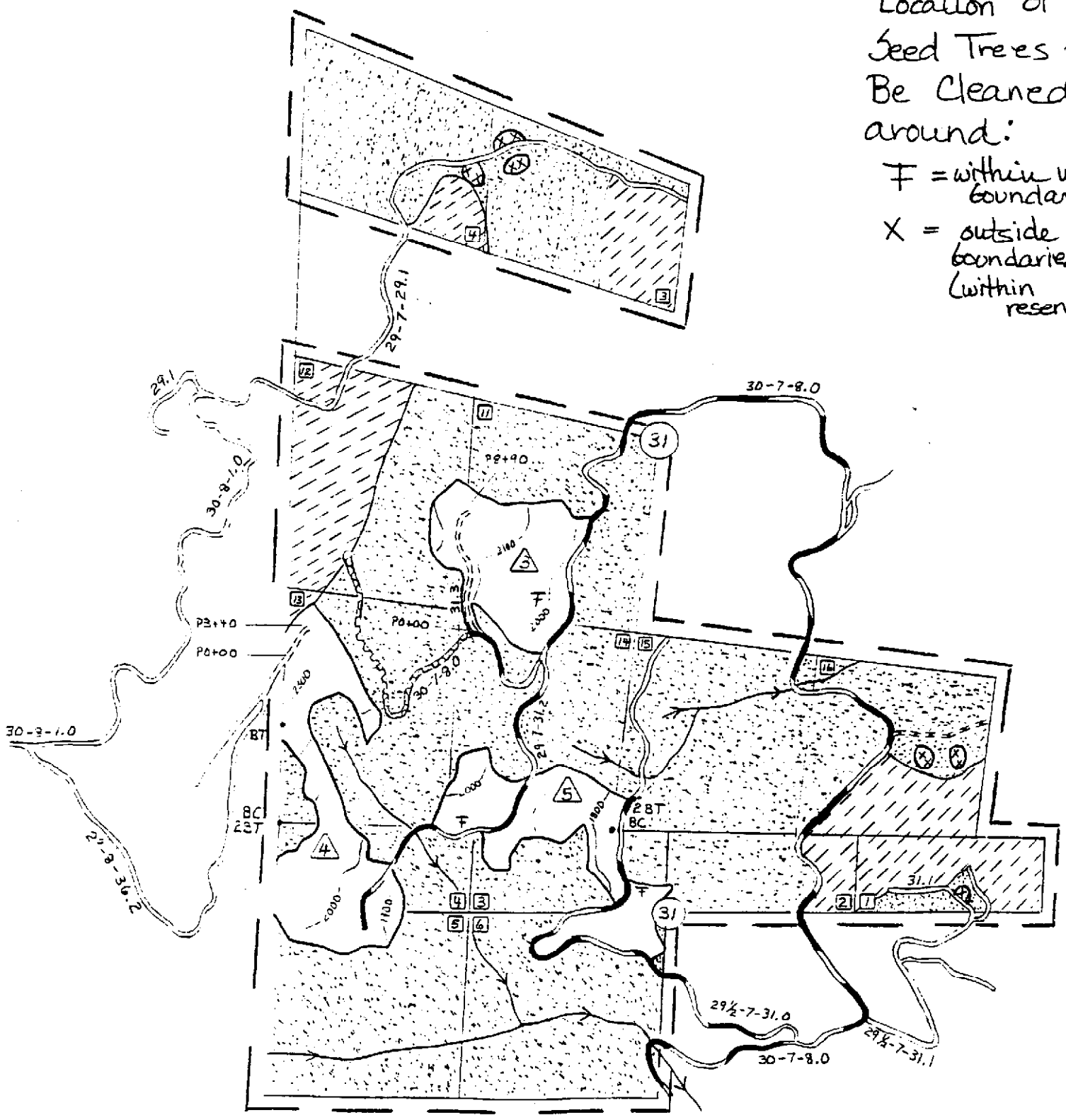
Tract Number

District	Township	Range	Section	Meridian	Contract Number
ROSEBURG	29 S 29½ S	7 W	31 31	WILLAMETTE	

Location of Seed Trees to Be Cleared around:

F = within unit boundaries

X = outside unit boundaries (within reserves)



UNIT MAP WITH SEED TREE LOCATIONS

APPENDIX A-2

APPENDIX B

CRITICAL ELEMENTS OF THE HUMAN ENVIRONMENT

The following elements of the human environment are subject to requirements specified in statute, regulation, or executive order.

These resources or values are either **not present** or **would not be affected by the proposed actions or alternative**, unless otherwise described in this EA. This negative declaration is documented below by individuals who assisted in the preparation of this analysis.

ELEMENT	NOT PRESENT	NOT AFFECTED	IN TEXT	INITIALS	TITLE
Air Quality		X		wja	Natural Resource Specialist Fuels Management
Areas of Critical Environmental Concern	X			JSB	Resources Forester
Cultural Resources	X			LMB	District Archaeologist
Farm Lands (prime or unique)	X			NEH	SOIL SCIENTIST
Floodplains		X		NEH	SOIL SCIENTIST
Native American Religious Concerns		X		JSB	Resources Forester
Threatened or Endangered Wildlife Species			X X	FMO RCH	WILDLIFE BIOLOGIST FISHERIES BIOLOGIST
Threatened or Endangered Plant Species	V			JSB	Forestry Tech
Wastes, Hazardous or Solid			X	ERW	HAZMAT COORD.
Water Quality Drinking/Ground		X		NEH	SOIL SCIENTIST
Wetlands/Riparian Zones		X		NEH	SOIL SCIENTIST
Wild & Scenic Rivers	X			BB	Env. Coord.
Wilderness	X			BB	"
Visual Resource Management		X		DPM	Outdoor Rec. Planner